

RAW SEQUENCE LISTING

ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/659,860

Source: O/PE

Date Processed by STIC: 9-22-00

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER,
703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/659,860

DATE: 09/22/2000
TIME: 14:48:08

Input Set : A:\RTS-0201_Seq_ASCII.txt
Output Set: N:\CRF3\09222000\I659860.raw

Does Not Comply
Corrected Diskette Needed

```

3 <110> APPLICANT: Hong Zhang
4      Andrew T. Watt
6 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF CASPASE 7 EXPRESSION
8 <130> FILE REFERENCE: RTS-0201
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/659,860
C--> 10 <141> CURRENT FILING DATE: 2000-09-11
10 <160> NUMBER OF SEQ ID NOS: 174
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 20
15 <212> TYPE: DNA
16 <213> ORGANISM: Artificial Sequence
W--> 18 <220> FEATURE:
18 <223> OTHER INFORMATION: Antisense Oligonucleotide
20 <400> SEQUENCE: 1
21 tccgtcatcg ctccctcaggg
24 <210> SEQ ID NO: 2
25 <211> LENGTH: 20
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
W--> 29 <220> FEATURE:
29 <223> OTHER INFORMATION: Antisense Oligonucleotide
31 <400> SEQUENCE: 2
32 atgcattctg ccccaagga
35 <210> SEQ ID NO: 3
36 <211> LENGTH: 2309
37 <212> TYPE: DNA
38 <213> ORGANISM: Homo sapiens
40 <220> FEATURE:
41 <221> NAME/KEY: CDS
42 <222> LOCATION: (44)...(955)
44 <400> SEQUENCE: 3
45 gagagactgt gccagtcaca gcccctac cgccgtggga acg átg gca gat gat
46                                         Met Ala Asp Asp
47                                         1
49 cag ggc tgt att gaa gag cag ggg gtt gag gat tca gca aat gaa gat
50 Gln Gly Cys Ile Glu Glu Gln Gly Val Glu Asp Ser Ala Asn Glu Asp
51      5          10          15          20
53 tca gtg gat gct aag cca gac cgg tcc tcc ttt gta ccg tcc ctc ttc
54 Ser Val Asp Ala Lys Pro Asp Arg Ser Ser Phe Val Pro Ser Leu Phe
55      25          30          35
57 agt aag aag aag aaa aat gtc acc atg cga tcc atc aag acc acc cgg
58 Ser Lys Lys Lys Asn Val Thr Met Arg Ser Ile Lys Thr Thr Arg
59      40          45          50
61 gac cga gtg cct aca tat cag tac aac atg aat ttt gaa aag ctg ggc
62 Asp Arg Val Pro Thr Tyr Gln Tyr Asn Met Asn Phe Glu Lys Leu Gly
63      55          60          65
65 aaa tgc atc ata ata aac aac aac ttt gat aaa gtg aca ggt atg

```

Missing mandatory <220>
feature required with <221>,
<222> or <223> features.

This error has been indicated
in the entire
sequence listing. Please review
and insert <220> where

required

RAW SEQUENCE LISTING DATE: 09/22/2000
PATENT APPLICATION: US/09/659,860 TIME: 14:48:08

Input Set : A:\RTS-0201_Seq_ASCII.txt
Output Set: N:\CRF3\09222000\I659860.raw

RAW SEQUENCE LISTING DATE: 09/22/2000
PATENT APPLICATION: US/09/659,860 TIME: 14:48:08

Input Set : A:\RTS-0201_Seq_ASCII.txt
Output Set: N:\CRF3\09222000\I659860.raw

135	tgtccactgc	aattgggtgt	aacagtggta	gagtcatgtt	tgcaacttggc	aaaaagaatc	1325
137	ccaatgttt	acaaaacaca	gccaagggaa	tatttactgc	tctttattgc	agaatgtggg	1385
139	tattgagtgt	gatttgcatt	ggcttagggc	aggatttcat	gcaaaagtgc	1445	
141	tcatacgat	tagaggagaa	aaagcttaat	gattatcgata	tgtatccatc	aggatccagt	1505
143	ctggaaaaca	gaaccattc	tagtgttcc	aacagaggga	gttatacaca	ggaaaattgac	1565
145	ttacatagat	gataaaagag	aagccaaaca	gcaagaagct	gttaccacac	ccagggctat	1625
147	gaggataatg	ggaagaggtt	tggtttctc	tgtccagtag	tggatcatc	cagaggagct	1685
149	ggaacctatg	tgggggctgc	ctagttggag	tttagaccac	caatggattt	tggaaaatgg	1745
151	acgcatacaca	agaacaaac	cactgactga	gatggagtga	gctgagacag	ataagagaat	1805
153	accttgcctc	acctatctg	ccctcatac	ttccaccagc	accttactgc	ccaggcctat	1865
155	ctggaagcca	cctccaccaag	gaccttggaa	gagaaggga	cagtggcga	ggagaagaac	1925
157	aagaatggt	tgtaaagctg	gcccataatg	tgaacataag	taatcactaa	tgctcaacaa	1985
159	tttatccatt	caatcattt	ttcatgggt	tgtcagatag	tctatgtatg	tgtaaaacaaa	2045
161	tctgttttgg	ctttatgtgc	aaaatctgtt	atagcttaa	aatatatctg	gaactttta	2105
163	gattatttcca	agccttattt	tgagtaaata	tttggtaactt	ttgttctat	aagtgaggaa	2165
165	gagtttatgg	caaagatttt	ttggcacttt	ttttcaagat	gggtgttatct	tttgaattct	2225
167	tgataatgg	ctgttttttt	ctgcctataa	gtaactgggt	aaaaaaacaaa	tgttcatatt	2285
169	tattgttataa	aaatgtgtt	gttt				2309
172	<210>	SEQ ID NO:	4				
173	<211>	LENGTH:	26				
174	<212>	TYPE:	DNA				
175	<213>	ORGANISM:	Artificial Sequence				
W-->	177	<220>	FEATURE:				
177	<223>	OTHER INFORMATION:	PCR Primer				
179	<400>	SEQUENCE:	4				
180	attgggtgtt	acagtggtag	agtcat				
183	<210>	SEQ ID NO:	5				
184	<211>	LENGTH:	20				
185	<212>	TYPE:	DNA				
186	<213>	ORGANISM:	Artificial Sequence				
W-->	188	<220>	FEATURE:				
188	<223>	OTHER INFORMATION:	PCR Primer				
190	<400>	SEQUENCE:	5				
191	cccttggctc	tgttttttgc					
194	<210>	SEQ ID NO:	6				
195	<211>	LENGTH:	27				
196	<212>	TYPE:	DNA				
197	<213>	ORGANISM:	Artificial Sequence				
W-->	199	<220>	FEATURE:				
199	<223>	OTHER INFORMATION:	PCR Probe				
201	<400>	SEQUENCE:	6				
202	ttgcacttg	caaaaagaat	cccaatg				
205	<210>	SEQ ID NO:	7				
206	<211>	LENGTH:	21				
207	<212>	TYPE:	DNA				
208	<213>	ORGANISM:	Artificial Sequence				
W-->	210	<220>	FEATURE:				
210	<223>	OTHER INFORMATION:	PCR Primer				
212	<400>	SEQUENCE:	7				

refer to
p. 1

RAW SEQUENCE LISTING DATE: 09/22/2000
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Input Set : A:\RTS-0201_Seq_ASCII.txt
 Output Set: N:\CRF3\09222000\I659860.raw

213 caacggattt ggtcgattt g	21
216 <210> SEQ ID NO: 8	
217 <211> LENGTH: 26	
218 <212> TYPE: DNA	
219 <213> ORGANISM: Artificial Sequence	
W--> 221 <220> FEATURE:	
221 <223> OTHER INFORMATION: PCR Primer	
223 <400> SEQUENCE: 8	
224 ggcaacaata tccactttac cagagt	
227 <210> SEQ ID NO: 9	
228 <211> LENGTH: 21	
229 <212> TYPE: DNA	
230 <213> ORGANISM: Artificial Sequence	
W--> 232 <220> FEATURE:	
232 <223> OTHER INFORMATION: PCR Probe	
234 <400> SEQUENCE: 9	21
235 cgcctgtcaccagggtgc t	
238 <210> SEQ ID NO: 10	
239 <211> LENGTH: 2006	
240 <212> TYPE: DNA	
241 <213> ORGANISM: Mus musculus	
243 <220> FEATURE:	
244 <221> NAME/KEY: CDS	
245 <222> LOCATION: (474)...(1496)	
247 <400> SEQUENCE: 10	
248 agctcaagtga ggctgatgt tactgcacat ttaaaaaaaaa aatcacagga atttcatac	60
250 aatgaataaa accacaacaa tacatgtaga attggcagggt ggaaaagac cagcaaggc	120
252 tcaaactaat cactcaactt ccctcttcag catagttcaa ccaacagtac cacacttca	180
254 cctacaataat ttaaagttagc tccatcaa at ctgcaggttt cacattattt aaaaatgtctg	240
256 tcacataggt acaaatttag aatcatcaca ttatattaca tggctattct aggtcatcta	300
258 tagatcagat ctttagactac agtgattgaa gttcttcgtt cagccatcaa aaaggacac	360
260 atgatcatta cctactgtta gtcacatct aaaggcatga aaaggtttcc ttttttccaa	420
262 ctgaccaaaa cactttaccc caatagtgcc aggtttccctc tctgctgctt tga atg	476
263 Met	
264 1	
266 ttc aca gcc caa gtg ttc tca gag tcc ttt aca aaa act gag ttg ctg	524
267 Phe Thr Ala Gln Val Phe Ser Glu Ser Phe Thr Lys Thr Glu Leu Leu	
268 5 10 15	
270 ccc tcg acc ctt gcg gag gac gga cgc tgc cgt ggg ctc ctg gcc gcc	572
271 Pro Ser Thr Leu Ala Glu Asp Gly Arg Cys Arg Gly Leu Leu Ala Ala	
272 20 25 30	
274 gcc gtg gga acg atg acc gat gat cag gac tgt gct gcg gag ctg gaa	620
275 Ala Val Gly Thr Met Thr Asp Asp Gln Asp Cys Ala Ala Glu Leu Glu	
276 35 40 45	
278 aag gtg gat tct tcc agc gaa gac gga gtt gac gcc aag cca gac cgc	668
279 Lys Val Asp Ser Ser Ser Glu Asp Gly Val Asp Ala Lys Pro Asp Arg	
280 50 55 60 65	
282 tcc tct atc atc tcc tct att ctc ttg aag aag aag aga aat gcc tct	716
283 Ser Ser Ile Ile Ser Ser Ile Leu Leu Lys Lys Arg Asn Ala Ser	

Refer to p.1

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Input Set : A:\RTS-0201_Seq_ASCII.txt
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284	70	75	80	
286	gcg ggc ccc gtc agg acc ggc cgg gac cga gtg ccc act tat ctg tac			764
287	Ala Gly Pro Val Arg Thr Gly Arg Asp Arg Val Pro Thr Tyr Leu Tyr			
288	85	90	95	
290	cgc atg gat ttc cag aag atg ggt aaa tgc atc atc ata aac aac aag			812
291	Arg Met Asp Phe Gln Lys Met Gly Lys Cys Ile Ile Ash Asn Lys			
292	100	105	110	
294	aac ttc gac aaa gcg aca ggt atg gac gtc cgg aat ggg acg gac aaa			860
295	Asn Phe Asp Lys Ala Thr Gly Met Asp Val Arg Asn Gly Thr Asp Lys			
296	115	120	125	
298	gat gca ggg gcc ctc ttc aag tgc ttc caa aac ctg ggt ttt gaa gta			908
299	Asp Ala Gly Ala Leu Phe Lys Cys Phe Gln Asn Leu Gly Phe Val			
300	130	135	140	145
302	acc gtc cac aat gac tgc tct tgt gca aag atg caa gat ctg ctt aga			956
303	Thr Val His Asn Asp Cys Ser Cys Ala Lys Met Gln Asp Leu Arg			
304	150	155	160	
306	aaa gcc tct gag gag gac cac agc aac tcg gcc tgc ttc gcc tgc gtc			1004
307	Lys Ala Ser Glu Glu Asp His Ser Asn Ser Ala Cys Phe Ala Cys Val			
308	165	170	175	
310	ctg ctg agc cac ggg gaa gag gac ctg att tac ggg aaa gat ggc gtg			1052
311	Leu Leu Ser His Gly Glu Glu Asp Leu Ile Tyr Gly Lys Asp Gly Val			
312	180	185	190	
314	aca ccc ata aag gat ctg aca gct cat ttt agg gga gac cga tgc aaa			1100
315	Thr Pro Ile Lys Asp Leu Thr Ala His Phe Arg Gly Asp Arg Cys Lys			
316	195	200	205	
318	acc ctg tta gag aaa ccc aaa ctc ttc ttc att cag gca tgc cga ggg			1148
319	Thr Leu Leu Glu Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Arg Gly			
320	210	215	220	225
322	acg gag ctc gac gat gga atc cag gct gac tcg ggg ccc atc aac gac			1196
323	Thr Glu Leu Asp Asp Gly Ile Gln Ala Asp Ser Gly Pro Ile Asn Asp			
324	230	235	240	
326	att gag gct aat ccc cgc aac aag atc ccg gtg gaa gcc gac ttc ctc			1244
327	Ile Asp Ala Asn Pro Arg Asn Lys Ile Pro Val Glu Ala Asp Phe Leu			
328	245	250	255	
330	ttt gct tac tcc acg gtt cca ggt tat tac tca tgg agg aac cca ggg			1292
331	Phe Ala Tyr Ser Thr Val Pro Gly Tyr Tyr Ser Trp Arg Asn Pro Gly			
332	260	265	270	
334	aaa ggc tcc tgg ttt gtg cag gcc ctc tgc tcc atc ctg aat gag cat			1340
335	Lys Gly Ser Trp Phe Val Gln Ala Leu Cys Ser Ile Leu Asn Glu His			
336	275	280	285	
338	ggc aag gac ctc gag atc atg cag atc ctg acc agg gtg aac gac agg			1388
339	Gly Lys Asp Leu Glu Ile Met Gln Ile Leu Thr Arg Val Asn Asp Arg			
340	290	295	300	305
342	gtg gcc agg cac ttc gag tcc cag tct gat gat cca cgc ttc aac gag			1436
343	Val Ala Arg His Phe Glu Ser Gln Ser Asp Asp Pro Arg Phe Asn Glu			
344	310	315	320	
346	aag aag cag atc ccg tgt atg gtg tcc atg ctc acc aaa gag ctg tac			1484
347	Lys Lys Gln Ile Pro Cys Met Val Ser Met Leu Thr Lys Glu Leu Tyr			
348	325	330	335	

VERIFICATION SUMMARY DATE: 09/22/2000
PATENT APPLICATION: US/09/659,860 TIME: 14:48:09

Input Set : A:\RTS-0201_Seq_ASCII.txt
Output Set: N:\CRF3\09222000\I659860.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:29 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:177 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:188 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:199 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:210 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:221 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:232 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:376 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:387 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:398 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:409 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:420 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:431 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:873 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:884 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:895 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:906 M:258 W: Mandatory Feature missing, <220> FEATURE:
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L:1027 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1038 M:258 W: Mandatory Feature missing, <220> FEATURE:
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L:1104 M:258 W: Mandatory Feature missing, <220> FEATURE:
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L:1181 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1192 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1203 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1214 M:258 W: Mandatory Feature missing, <220> FEATURE:

VERIFICATION SUMMARY DATE: 09/22/2000
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Input Set : A:\RTS-0201_Seq_ASCII.txt
Output Set: N:\CRF3\09222000\I659860.raw

L:1225 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1236 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1247 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1258 M:258 W: Mandatory Feature missing, <220> FEATURE: